Region 1, Alabama

Region 1, 700 MHz Regional Planning Committee
Eric Linsley, Chairman
1150 Schillinger Road North
Mobile, AL 36608

August 28, 2015

Federal Communications Commission
Office of the Secretary
Chief, Public Safety and Homeland Security Bureau
445 12th Street, SW
Washington, D.C. 20554

Subject: FCC 14-172, DA 15-476
Revised Region 1 - 700 MHz Regional Plan

Dear Sirs:

Attached is the Revised Region 1 700 MHz Regional Plan for your review and approval. This communications plan replaces our previously submitted request. We have successfully coordinated our revised plan with all the adjacent regions and have received concurrence from each. See attached.

This modified plan includes the following changes/revisions:

- Region 1 Officers and Committee Position Changes
- Adding Section 5.5 Orphan Channels
- Removal of Section 6.2 Simplex On-Scene Statewide Analog Tactical Channels
- Adding Section 6.2 Adjacent State Tactical Channels
- Adding Section 6.3 Interoperability Channel Technical Parameters
- Added Section 9 Reserve Spectrum

We are confident that this plan best represents the immediate and future communication needs of all Public Safety and First Responders in the great State of Alabama. I would like to recognize

and commend the many Public Safety Communications Officials on the Regional Planning Committee that made the numerous road trips across the State of Alabama in assisting these modifications and to attend our meetings.

It is our hope that this Plan will meet your approval and allow public safety agencies in Alabama access to this much needed spectrum.

Respectfully,

Eric Linsley
Chairman Region 1 RPC
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(800 & 700 MHz Regional Planning)

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May 7, 2015

Mr. Eric Linsley
Director Public Safety Communications
APCO Alabama State Alternate Frequency Advisor
Chairman Region 1 Alabama 700MHz & 800 MHz Planning Committee
Mobile County Electronics Department
1150 Schillinger Road North
Mobile, AL 36608

Dear Eric:

The Florida Regional Planning committee was pleased to receive your revised plan on Monday. Happily, The Florida Regional Planning Committee was meeting the next day for the yearly review of the Region 9 operations.

Please to advise that your plan revisions were voted and accepted by the full committee on Tuesday.

Therefore, this is your concurrence letter for your revision dated 4-6-2015.

Sincerely,

Ray Carlson

Chairman.

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June 9, 2015

Federal Communications Commission
Wireless Telecommunications Bureau
1270 Fairfield Road
Gettysburg, PA 17325-7245

Ref: Region 1, RPC 700 MHz Plan Changes

Dear Sir/Madam:
The purpose of this letter is to provide concurrence and approval of the following changes to Region 1, 700MHz RPC Plan:

- Region 1 Officers and Committee Position Changes
- Adding Section 5.5 Orphan Channels
- Removal of Section 6.2 Simplex On-Scene Statewide Analog Tactical Channels
- Adding Section 6.2 Adjacent State Tactical Channels
- Adding Section 6.3 Interoperability Channel Technical Parameters
- Added Section 9 Reserve Spectrum

This action is in compliance with the Region 10, 700 MHz Plan, and is recommended to be acted upon favorably by the FCC.

Thank you for your assistance and cooperation in this matter.

Respectively,

Jim Mollohan
700/800MHz RPC, Region 10 Chairman

cc: Eric Linsley, Chairman, Region 1, 700/800MHz RPC
Ralph Bevan, GTA

Mississippi 700 MHz Regional Planning & Frequency Advisory Committee

May 11, 2015

Eric Linsley
Chairman Region 1700MHz & 800 MHz Planning Committee
1150 Schillinger Road North
Mobile, AL 36608

Dear Mr. Linsley,
Region 23 on May 6, 2015, received and reviewed the modifications to the Region 1 700 MHz Plan.

This letter serves as the official, written concurrence of Region 23 with the Region 1 700 MHz Plan as reviewed on the date specified above.

Respectfully,

Thomas Lariviere

Tom Lariviere,
MSRPFAC

NPSPAC

700 MHz Region 39, Tennessee

NPSPAC Region 39 800 MHz Regional Review Committee

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28 August 2015

Federal Communications Commission
Wireless Telecommunications Bureau
1270 Fairfield Road
Gettysburg, PA 17325-7245

Ref: Region 1, RPC 700 MHz Plan Changes

Dear Sir/Madam:
The purpose of this letter is to provide concurrence and approval of the following changes to Region 1, 700MHz RPC Plan:

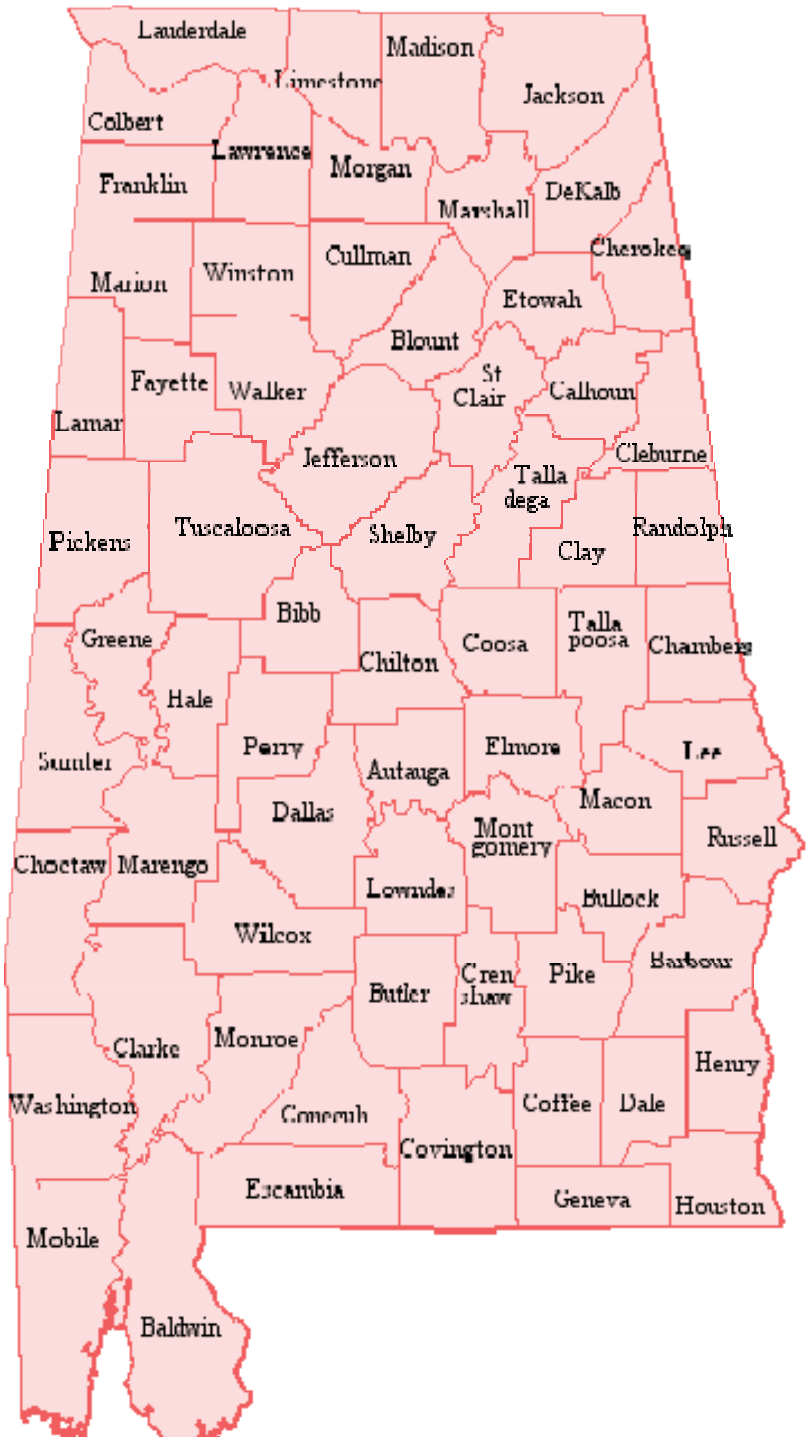
- Region 1 Officers and Committee Position Changes
- Adding Section 5.5 Orphan Channels
- Removal of Section 6.2 Simplex On-Scene Statewide Analog Tactical Channels
- Adding Section 6.2 Adjacent State Tactical Channels
- Adding Section 6.3 Interoperability Channel Technical Parameters
- Added Section 9 Reserve Spectrum

This action is in compliance with the Region 39, 700 MHz Plan, and is recommended to be acted upon favorably by the FCC.
Thank you for your assistance and cooperation in this matter.

Respectfully,

Jesse D. Griggs
Region 39 Chair

Public Safety 700 MHz
Communications Plan
For Region 1
The State of Alabama



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1. Region 1 Officers and Committee Positions

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Subcommittees:

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2. Alabama Region 1 Plan Committee Memberships

Appendix 3 contains the membership list for Region 1. Membership is open to any individual or Public Safety Agency representatives interested in developing a state-wide plan for 700 MHz in Alabama. Any member of an Alabama Public Safety agency may run for any elected position. All meetings are governed by Robert's Rules of Order. All members of an Alabama Public Safety agency may attend any meeting of this Planning group. All agencies are entitled to one vote regardless of the number of attendees by that agency. Voting members and requirements are described in parts 2.1 of the Region I Bylaws.

3. Alabama Region 1 Descriptions

Region 1, Alabama, consists of 67 counties and 52,423 square miles in area. Alabama's highest elevation is at Cheaha Mountain: 2407 feet and lowest point is sea level at the Gulf of Mexico. Topography includes coastal plains, hills, and broken terrain. Population is 4,447,100 with 6 major population centers. Alabama is primarily an agricultural region with existing industries in paper, lumber, and wood products, mining, rubber, and plastic products, transportation equipment and apparel. While our population growth is not rapid we are in the process of playing catch up with our communications needs. Alabama's state, county, and municipal public safety agencies and services use radio in Low Band, VHF, UHF, and 800MHz.

4. Alabama Region 1 Notification Process

The First Regional Plan Meeting was held on January, 2002. The FCC provided a Public Notice and local invitations were sent by E-mail to all Public Safety Agencies, the members of Alabama APCO, Alabama NENA, and various public safety users groups. The convener Captain David A. Rose of the City of Mobile Fire-Rescue Department contacted many agencies by telephone. It was agreed that the E-mail system of notification worked well and all agencies picked this as the primary notification system. A list server was set up on yahoo groups and advertised at all meetings. It is noted that the Alabama Indian Affairs Commission recognizes 22 Indian Tribes and Commissioners (see appendix 11). Their single email address; **aiac@mindspring.com** is added to our E-Mail notification.

5. Alabama Region 1 Plan Administration

5.1 Operations of the Region 1 Plan Committee

This committee will use Robert's Rules of Order to conduct meetings. All decisions will be by clear consensus vote with each Public Safety Agency casting one vote. The meetings are open to all persons and a public input time is provided to assess the viewpoint of the whole group about the planning process. Subcommittees may be formed as needed to work on specific issues. Subcommittees are intended to work on details and making recommendations to the full committee.

Changes or modifications to the completed Region 1 700MHz Plan must be voted and approved by the full Regional Plan Committee. The Chairman of the Region 1 Planning Committee appoints the chairman for each subcommittee. The subcommittee chairman selects the subcommittee members from eligible voting or non-voting Region 1 members.

The following is our process:

1. A minimum of one meeting per year will be held of the full committee.
2. Special meetings may be called if conflicts in frequency assignment occur.
3. The Chairman shall see that elections are held at a minimum every two years to elect or reelect the Chairman and/or Vice Chairman's positions, treasurer and secretary. There are no term limits for any elected position.
4. If the Chairman is unable to serve a complete term the Vice-Chair will serve as Chairperson until an election can be held.
5. If both the Chair and Vice-Chair are unable to serve their full terms an emergency meeting will be called to elect officers.
6. All meetings will have 90 day notice prior to the date selected
7. For further clarifications refer to the Bylaws in appendix 2.

5.2 Procedure for Requesting Spectrum Allotments

Region 1 will utilize the following process and procedures to assure that allocation and assignment of frequencies meets the Computer Assisted Pre-coordination Resource and Database system (CAPRAD) frequency database attached in the appendixes. When the Alabama Plan is approved the following procedures will be used:

- Requesting agencies shall submit the appropriate Federal Communications Commission Form to one of the authorized F.C.C. Frequency Coordinators of their choice.
- The Frequency Coordinators will use the CAPRAD frequency allocations by county first based on the Region 1 Plan.
- All spectrum requests shall be on first come first serve basis.
- In the absence of those county's allocated frequencies, the Frequency Coordinator will use the un-allocated frequency pool.
- Adjacent Regions close enough to be affected by a frequency that is selected from the un-allocated frequency pool will be coordinated by the CAPRAD Frequency Database.
- The Frequency Coordinator will pick the best frequency according to F.C.C. standard of interference.
- All frequencies used are subject to F.C.C. rules and regulations.
- Protests of any frequency assignment will be considered if interference or violation of this plan is the issue.
- An agency may protest approval within 30 calendar days. Protests must be heard by the whole committee within thirty days of the filing of a written protest.

5.3 Procedure for Frequency Coordination

The Region 1 plan for application submission for any 700MHz spectrum is based on our dependence on the CAPRAD frequency database. Applications may be made to any one of the FCC recognized frequency coordinators using the allocated county frequencies.

This process allows the frequency allocation to move forward expeditiously. We have discussed to increase the initial CAPRAD allotments to counties having a projection population increase for the next 25 years (see Appendix 5) but decided that if all the spectrum allotments for a particular county are used, the frequency coordinator will search for the best frequency from the un-allocated frequency pool. It is only when a conflict occurs due to a technical problem, or shortage of spectrum that the committee of the whole needs to be called into session. All applications will be handled on a first-come / first-served basis.

Since many Alabama Public Safety agencies have no local technical persons on staff, we believe that the process we have outlined above will cause the least amount of problems for our Public Safety agencies in filing their license applications. APCO, NENA, or The

Alabama Mutual Aid System will try to assist requesting agencies with technical assistance. All companies supplying equipment must advise their clients that their equipment will meet the appropriate published standards.

We believe that an interference prediction map is not necessary due to our reliance on the CAPRAD frequency database.

5.4 Adjacent Region Spectrum Allocation

Region 1 shares borders with Florida, Georgia, Tennessee, and Mississippi. Our population density on the borders of adjoining states should have been handled in the creation of the CAPRAD frequency database but adjacent regions will be notified of any applications that potentially interfere with their region. However, if an adjacent Region has difficulties satisfying intra-regional requests due to channel allocation within Alabama, our committee will use the Inter-Regional Coordination Procedure and Procedures for Resolution of Disputes That May Arise Under FCC Approved Plans as our procedure for resolutions of adjacent region disputes. See Appendix 12.

5.5 Orphan Channels

Only pertains to General Use Spectrum. The original plan frequency allocation was developed with 25 kHz channels. As requests for frequencies were made, the 25 kHz channel was split into two 12.5 kHz channels. The first 12.5 kHz channels (lowest in frequency) are the assigned channels, and the second 12.5 kHz channels (highest in frequency) are the Orphan Channels. Orphan Channels can be used in adjacent counties provided that they are at least 38 miles from an adjacent channel.

5.6 Dispute Resolution

If an agency disputes the implementation of this plan after the FCC approves it, then the agency must notify the Chairman in writing of the nature of the dispute. The Chairman will attempt to resolve the dispute informally. If this cannot be accomplished, then the full committee will be called to a meeting to decide the issue. When a dispute involves an agency that employs any member of the planning committee that person may participate in the resolution of that dispute but not act as the mediator and may not vote on the outcome of the resolution. If no common ground can be found in settling the dispute then all pertinent information will be forwarded to the National Regional Planning Oversight Committee, a subcommittee of the National Public Safety Telecommunications Committee (NPSTC) for review. As a last resort, the dispute will be forward to the Federal Communications Commission for final resolution.

6. Alabama Region 1 Interoperability Channels

6.1 Introduction

Interoperability is a major concern for Public Safety agencies in the State of Alabama. Occasionally there is a need for multiple agencies to respond to disasters such as tornadoes, hurricanes, floods, fires, and now the threat of terrorist activity. As a result, Mutual Aid agreements have been created for Public Safety agencies throughout the state to send units from any area within the state to assist any other city or county regardless of distance.

6.2 Adjacent State Tactical Channels

Additionally, it is our desire that we have common Interoperability Channels used within the State of Alabama and by all adjacent states. The below table is the same for Region 24 and Region 39 and will be for Region 1. It is our desire to adopt the common nomenclature as defined by NCC / NPSTC Standard Channel Nomenclature for the Public Safety Interoperability Channels.

For Specific Uses/Services

*** - Mandatory**

16 CHANNEL SETS	**DESCRIPTION**	**LABEL**
Channel 23 & 24	General Public Safety Services	7TAC51
Channel 103 & 104	General Public Safety Services	7TAC52
Channel 183 & 184	General Public Safety Services	7TAC53
Channel 263 & 264	General Public Safety Services	7TAC54
Channel 39 &40	Calling Channel *	7CALL50
Channel 119 & 120	General Public Safety Service *	7TAC55
Channel 199 & 200	General Public Safety Service	7TAC56
Channel 279 & 280	Mobile Data	7DATA69
Channel 63 & 64	Emergency Medical Service	7MED65
Channel 143 & 144	Fire Service	7FIRE63
Channel 223 & 224	Law Enforcement Service	7LAW61
Channel 303 & 304	Mobile Repeater *	7MOB59
Channel 79 & 80	Emergency Medical Service	7MED66
Channel 159 & 160	Fire Service	7FIRE64
Channel 239 & 240	Law Enforcement Service	7LAW62
Channel 319 & 320	Other Public Service *	7GTAC57
Channel 657 & 658	General Public Safety Services	7TAC71
Channel 737 & 738	General Public Safety Services	7TAC72
Channel 817 & 818	General Public Safety Services	7TAC73
Channel 897 & 898	General Public Safety Services	7TAC74
Channel 681 & 682	Calling Channel *	7CALL70
Channel 761 & 762	General Public Safety Service *	7TAC75
Channel 841 & 842	General Public Safety Service	7TAC76

Channel 921 & 922	Mobile Data	7DATA89
Channel 641 & 642	Emergency Medical Service	7MED86
Channel 721 & 742	Fire Service	7FIRE83
Channel 801 & 802	Law Enforcement Service	7LAW81
Channel 881 & 882	Mobile Repeater *	7MOB79
Channel 697 & 698	Emergency Medical Service	7MED87
Channel 777 & 778	Fire Services	7FIRE84
Channel 857 & 858	Law Enforcement Service	7LAW82
Channel 937 & 938	Other Public Services*	7GTAC77

6.3 Interoperability Channel Technical Parameters

Project 25 Common Air Interface

Certain common P25 parameters need to be defined to ensure digital radios operating on the 700 MHz Interoperability Channels can communicate. This is analogous to defining the common CTCSS tone used on NPSPAC analog Interoperability channels.

Network Access Code

In the Project 25 Common Air Interface definition, the Network Access Code (NAC) is analogous to the use of CTCSS and CDCSS signals in analog radio systems. It is a code transmitted in the pre-amble of the P25 signal and repeated periodically throughout the transmission. Its purpose is to provide selective access to and maintain access to a receiver. It is also used to block nuisance and other co-channel signals. There are up to 4096 of these NAC codes. For ease of migration in other frequency bands, a NAC code table was developed which shows a mapping of CTCSS and CDCSS signals into corresponding NAC codes. Document TIA/EIA TSB102.BAAC contains NAC code table and other Project 25 Common Air Interface Reserve Values.

The use of NAC code $293 is required for the 700 MHz Interoperability Channel NAC code.

Talk group ID

In the Project 25 Common Air Interface definition, the Talk group ID on conventional channels is analogous to the use of talk groups in Trunked radio. In order to ensure that all users can communicate, all units should use a common Talk group ID.

Recommendation: Use P25 default value for Talk group ID = $0001

Manufacturer's ID

The Project 25 Common Air Interface allows the ability to define manufacturer specific functions. In order to ensure that all users can communicate, all units should not use a specific Manufacturer's ID, but should use the default value of $00.

Message ID

The Project 25 Common Air Interface allows the ability to define specific message functions. In order to ensure that all users can communicate, all units should use the default Message ID for unencrypted messages of $0000000000000000000.

Encryption Algorithm ID and Key ID

The FCC has updated encryption capabilities.

§90.553 Encryption.

(a) Encryption is permitted on all but the two nationwide Interoperability calling channels. Radios employing encryption must have a readily accessible switch or other readily accessible control that permits the radio user to disable encryption.

(b) If encryption is employed, then transmitters manufactured after August 11, 2014 must use the Advanced Encryption Standard (AES) specified in ANSI/TIA-102.AAAD-A: Project 25 Digital Land Mobile Radio-Block Encryption Protocol, approved August 20, 2009 Until 2030, manufacturers may also include the Digital Encryption Standard (DES) or Triple Data Encryption Algorithm (TDEA), in addition to but not in place of AES, for compatibility with legacy radios that lack AES capability.

The Project 25 Common Air Interface allows the ability to define specific encryption algorithms and encryption keys. In order to ensure that all users can communicate, encryption should not be used on the Interoperability Calling Channels, all units should use the default Algorithm ID for unencrypted messages of $80 and default Key ID for unencrypted messages of $0000. These same defaults may be used for the other Interoperability channels when encryption is not used.

Use of encryption is allowed on the other Interoperability channels. Regional Planning Committees need to define appropriate Message ID, Encryption Algorithm ID, and Encryption Key ID to be used in the encrypted mode on Interoperability channels.
Due to the number of natural disaster type events that take place simultaneously in Alabama that for interoperability use all radios should have the minimum number of National Interoperability Channels called for in the NCC guidelines. All of these National Interoperability Channels should have met the NCC guidelines using common alphanumeric nomenclature.

6.4 Interoperability Channels Use

Region 1 will equip state owned communications vehicles with radio equipment to support interoperability at remote locations. They will also support mutual aid task force events statewide. Almost all interoperability communications in this state use National Interoperability VHF, UHF channels, NPSPAC channels, or state wide mutual aid channels.

6.5 Calling Channels

Any Agency deploying 700 MHz spectrum must install the National Interoperability Channels at their dispatch point for emergency calls.

7. Alabama Region 1 Interference Protection

All initial spectrum allotments were made by CAPRAD which has interference protection. Any additional spectrum allotments made by a frequency search by a F.C.C. Frequency Coordinator must give interference protection which is the F.C.C. standard of that time. Interference predictions in Alabama can be problematic due to the geography of mountains, rolling hills, rivers, and gullies. We hope that users and designers recognize that better equipment may limit interference.

8. Alabama Region 1 Allocation of Narrowband Low Power Spectrum

8.1 Narrowband Low Power Channels

In the 700 MHz spectrum, the FCC set aside channels numbers 1 through 8 paired with 961 through 968, and channel numbers 949 through 958 paired with 1909 through 1918 for low power use for on scene response purposes using mobiles and portable radios. Transmit power not to exceed 2 watts. (ERP)

8.2 Narrowband Low Power Nationwide Itinerant Channels

In the 700 MHz spectrum, the FCC set aside channels 9 through 12 paired with 969 through 972, and channel numbers 959 through 960 paired with 1919 through 1920. Transmit power is not to exceed 2 watts. (ERP)

These selected channels may operate using analog operations. Analog modulation will require two (2) channels to allow for 12.5 kHz bandwidth. On scene base and portable relay stations are limited by existing FCC regulations 6.1 meters above the ground. We encourage the use of simplex mode when possible. Alabama does not limit use to analog use exclusively. These channels are intended for a wide variety of uses and some that may require digital modulation. Therefore we choose not to assign them to a particular public safety discipline. No Alabama Public Safety agency requested spectrum in the initial filing period. Therefore no allocations were made. Based on the CAPRAD frequency database all voice channels can be in 25 kHz for various digital technologies, 6.25 kHz for each voice channel, or for narrow band if requested.

8.3 Narrowband Low Power Secondary Trunking Operations

Using existing FCC rules in order to facilitate portable operation by public safety agencies for special purposes we recommend certain low power secondary use be allowed. Public Safety agencies already licensed to use one or more general use channels in this plan may

license any additional channel for secondary use based on meeting the following requirements:

- Operations of these units will be considered secondary to other licensees on co-channel and adjacent channels.
- No wide area channels may be used for secondary purpose.
- Channels will be licensed for specific area use.
- Maximum power will be limited to 6 watts ERP.
- No use on aircraft.
- License may be reviewed at any time due to complaints or interference.
- Secondary channel users are not protected from agencies requiring those channels for their primary use.

8.4 Priority for Receiving Spectrum Allocations

The six television stations now in operation in Alabama provide signal coverage in the most populated areas. See Appendix 4. We feel that no station operating license extension should be granted to these television stations so that we may issue this spectrum to Region 1 Pubic Safety Agencies in a timely manner.

9. Reserve Spectrum

This plan recognizes FCC DA 15-34 guidance for licensing channels in the former 700 MHz Narrowband Reserve Channels. There are twenty four 12.5 kHz channels that have been released to General Use under the administration of the RPC for the benefit of state and local public safety users. Applicants seeking to license these former reserve channels shall file a FCC Form 601 and received RPC approval. In analyzing the frequencies as they relate to other adjacent channels, not all of them are suitable for statewide use and will be available . We have made three categories, Deployable Trunked Systems, FB2T/MO3's and Pool.

9.1 Deployable Trunked Systems

The efforts of NPSTC and NRPC have recommended 6 channels for deployable trunked system. Alabama adds two more frequencies for an 8 channel deployable trunked system to be utilized throughout the State of Alabama. They are:

Class	Channel	Base Frequency	Mobile Frequency	Label	NOTES	ERP
General Use	37-38	769.23125	799.23125	FB2T	1	Deploy
General Use	61-62	769.38125	799.38125	FB2T	2	Deploy
General Use	117-118	769.73125	799.73125	FB2T	3	Deploy
General Use	141-142	769.88125	799.88125	FB2T	4	Deploy
General Use	301-302	770.88125	800.88125	FB2T	7	Deploy
General Use	699-700	773.36875	803.36875	FB2T	8	Deploy
General Use	883-884	774.51875	804.51875	FB2T	5	Deploy
General Use	939-940	774.86875	804.86875	FB2T	6	Deploy

9.2 MO3 / FB2T's

There is a need to identify and set aside multiple Fixed Base Repeaters and Vehicular Repeater Pairs to be used throughout the State of Alabama. The maximum ERP is 30 watts. They are:

Class	Channel	Base Frequency	Mobile Frequency	Label	NOTES	ERP
General Use	77-78	769.48125	799.48125	MO3/FB2T	1	30 watts
General Use	157-158	769.98125	799.98125	MO3/FB2T	2	30 watts
General Use	197-198	770.23125	800.23125	MO3/FB2T	3	30 watts
General Use	237-238	770.48125	800.48125	MO3/FB2T	4	30 watts
General Use	277-278	770.73125	800.73125	MO3/FB2T	5	30 watts
General Use	317-318	770.98125	800.98125	MO3/FB2T	6	30 watts
General Use	643-644	773.01875	803.01875	MO3/FB2T	7	30 watts
General Use	683-684	773.26875	803.26875	MO3/FB2T	8	30 watts
General Use	723-724	773.51875	803.51875	MO3/FB2T	9	30 watts
General Use	763-764	773.76875	803.76875	MO3/FB2T	10	30 watts
General Use	803-804	774.01875	804.01875	MO3/FB2T	11	30 watts
General Use	843-844	774.26875	804.26875	MO3/FB2T	12	30 watts
General Use	923-924	774.76875	804.76875	MO3/FB2T	13	30 watts

9.3 Pool Frequencies

The frequencies that were not suitable to be used throughout the states because they were adjacent channels to state licensed and interoperability and could have interference potential. The will be kept in General Category and are to be used as a fixed site, first-come, and first used basis.

10. Spectrum Utilization

This plan will allow Alabama public safety agencies to move to the 700 MHz spectrum at such time as it becomes financially feasible. Many agencies are presently trying to modernize existing communications by establishing interoperability capabilities and increasing existing capabilities by adding modern equipment. Our initial position allows for and open filing window based on channel allocations for each of Alabama's 67 counties. The Plan Report of Detailed Channel Allotment can be found in Appendix 10.

At this time there is no way that this regional planning committee may anticipate or estimate the movement of agencies with Alabama's migration to the 700 MHz spectrum.
We believe that this plan will enable Alabama, when the time is appropriate, a smooth transition to the 700 MHz band.

We encourage the use of 6.25 kHz in place of 12.5 kHz as advances in communications technology allow for best spectrum operational efficiencies. We also advocate the usage of

digital modulations such as Time Domain Multiple Access, Frequency Domain Multiple Access, and other modulations for the best spectrum efficiency.